

§ 924.13

23 CFR Ch. I (4–1–16 Edition)

130 for highway safety improvement program purposes. In addition, up to 2 percent of the section 130 funds apportioned to a State may be used for compilation and analysis of safety data for the annual report to the FHWA Division Administrator required under § 924.15(a)(2) on the progress being made to implement the railway-highway grade crossing program.

(e) Highway safety improvement projects may also be implemented with other funds apportioned under 23 U.S.C. 104(b) subject to the eligibility requirements applicable to each program.

(f) Award of contracts for highway safety improvement projects shall be in accordance with 23 CFR part 635 and part 636, where applicable, for highway construction projects, 23 CFR part 172 for engineering and design services contracts related to highway construction projects, or 49 CFR part 18 for non-highway construction projects.

(g) All safety projects funded under 23 U.S.C. 104(b)(5), including safety projects under any other section, shall be accounted for in the statewide transportation improvement program and reported on annually in accordance with § 924.15.

(h) The Federal share of the cost for most highway safety improvement projects carried out with funds apportioned to a State under 23 U.S.C. 104(b)(5) shall be a maximum of 90 percent. In accordance with 23 U.S.C. 120(a) or (b), the Federal share may be increased to a maximum of 95 percent by the sliding scale rates for States with a large percentage of Federal lands. In accordance with 23 U.S.C. 120(c), projects such as roundabouts, traffic control signalization, safety rest areas, pavement markings, or installation of traffic signs, traffic lights, guardrails, impact attenuators, concrete barrier end treatments, breakaway utility poles, or priority control systems for emergency vehicles or transit vehicles at signalized intersections may be funded at up to 100 percent Federal share, except not more than 10 percent of the sums apportioned under 23 U.S.C. 104 for any fiscal year shall be used at this Federal share rate. In addition, for railway-highway grade crossings, the Federal share may amount up to 100 percent for projects

for signing, pavement markings, active warning devices, and crossing closures, subject to the 10 percent limitation for funds apportioned under 23 U.S.C. 104 in a fiscal year.

(i) The implementation of the HSIP in each State shall include a process for implementing highway safety improvement projects in accordance with the procedures set forth in 23 CFR part 630, subpart A (Preconstruction Procedures: Project Authorization and Agreements).

§ 924.13 Evaluation.

(a) The HSIP evaluation process shall include the evaluation of the overall HSIP and the SHSP. It shall:

(1) Include a process to analyze and assess the results achieved by the HSIP in reducing the number of crashes, fatalities and serious injuries, or potential crashes, and in reaching the performance goals identified in § 924.9(a)(3)(ii)(G).

(2) Include a process to evaluate the overall SHSP on a regular basis as determined by the State and in consultation with the FHWA to:

(i) Ensure the accuracy and currency of the safety data;

(ii) Identify factors that affect the priority of emphasis areas, strategies, and proposed improvements; and

(iii) Identify issues that demonstrate a need to revise or otherwise update the SHSP.

(b) The information resulting from the process developed in § 924.13(a)(1) shall be used:

(1) For developing basic source data in the planning process in accordance with § 924.9(a)(1);

(2) For setting priorities for highway safety improvement projects;

(3) For assessing the overall effectiveness of the HSIP; and

(4) For reporting required by § 924.15.

(c) The evaluation process may be financed with funds made available under 23 U.S.C. 104(b)(1), (3), and (5), 105, 402, and 505, and for metropolitan planning areas, 23 U.S.C. 104(f).

§ 924.15 Reporting.

(a) For the period of the previous year, each State shall submit to the FHWA Division Administrator no later

than August 31 of each year the following reports related to the HSIP in accordance with 23 U.S.C. 148(g):

(1) A report with a defined one year reporting period describing the progress being made to implement the State HSIP that:

(i) Describes the progress in implementing the projects, including the funds available, and the number and general listing of the types of projects initiated. The general listing of the projects initiated shall be structured to identify how the projects relate to the State SHSP and to the State's safety goals and objectives. The report shall also provide a clear description of the project selection process;

(ii) Assesses the effectiveness of the improvements. This section shall: Provide a demonstration of the overall effectiveness of the HSIP; include figures showing the general highway safety trends in the State by number and by rate; and describe the extent to which improvements contributed to performance goals, including reducing the number of roadway crashes leading to fatalities and serious injuries.

(iii) Describes the High Risk Rural Roads program, providing basic program implementation information, methods used to identify high risk rural roads, information assessing the High Risk Rural Roads program projects, and a summary of the overall High Risk Rural Roads program effectiveness.

(2) A report describing progress being made to implement railway-highway grade crossing improvements in accordance with 23 U.S.C. 130(g), and the effectiveness of these improvements.

(3) A transparency report describing not less than 5 percent of a State's highway locations exhibiting the most severe safety needs that:

(i) Identifies potential remedies to those hazardous locations; estimates costs associated with the remedies; and identifies impediments to implementation other than cost associated with those remedies;

(ii) Emphasizes fatality and serious injury data;

(iii) At a minimum, uses the most recent three to five years of crash data;

(iv) Identifies the data years used and describes the extent of coverage of all

public roads included in the data analysis;

(v) Identifies the methodology used to determine how the locations were selected; and

(vi) Is compatible with the requirements of 29 U.S.C. 794(d), Section 508 of the Rehabilitation Act.

(b) The preparation of the State's annual reports may be financed with funds made available through 23 U.S.C. 104(b)(1), (3), and (5), 105, 402, and 505, and for metropolitan planning areas, 23 U.S.C. 104(f).

EFFECTIVE DATE NOTE: At 81 FR 13739, Mar. 15, 2016, part 924 was revised, effective Apr. 14, 2016. For the convenience of the user, the revised text is set forth as follows:

PART 924—HIGHWAY SAFETY IMPROVEMENT PROGRAM

Sec.

924.1 Purpose.

924.3 Definitions.

924.5 Policy.

924.7 Program structure.

924.9 Planning.

924.11 Implementation.

924.13 Evaluation.

924.15 Reporting.

924.17 MIRE fundamental data elements.

AUTHORITY: 23 U.S.C. 104(b)(3), 130, 148, 150, and 315; 49 CFR 1.85.

§ 924.1 Purpose.

The purpose of this regulation is to prescribe requirements for the development, implementation, and evaluation of a highway safety improvement program (HSIP) in each State.

§ 924.3 Definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) are applicable to this part. In addition, the following definitions apply:

Hazard index formula means any safety or crash prediction formula used for determining the relative risk at railway-highway crossings, taking into consideration weighted factors, and severity of crashes.

Highway means:

(1) A road, street, or parkway and all associated elements such as a right-of-way, bridge, railway-highway crossing, tunnel, drainage structure, sign, markings, guard-rail, protective structure, etc.;

(2) A roadway facility as may be required by the United States Customs and Immigration Services in connection with the operation of an international bridge or tunnel; and

(3) A facility that serves pedestrians and bicyclists pursuant to 23 U.S.C. 148(e)(1)(A).

Highway Safety Improvement Program (HSIP) means a State safety program with the purpose to reduce fatalities and serious injuries on all public roads through the implementation of the provisions of 23 U.S.C. 130, 148, and 150, including the development of a data-driven Strategic Highway Safety Plan (SHSP), Railway-Highway Crossings Program, and program of highway safety improvement projects.

Highway safety improvement project means strategies, activities, or projects on a public road that are consistent with a State SHSP and that either correct or improve a hazardous road segment, location, or feature, or addresses a highway safety problem. Examples of projects are described in 23 U.S.C. 148(a).

MIRE Fundamental data elements mean the minimum subset of the roadway and traffic data elements from the FHWA's Model Inventory of Roadway Elements (MIRE) that are used to support a State's data-driven safety program.

Public railway-highway crossing means a railway-highway crossing where the roadway (including associated sidewalks, pathways, and shared use paths) is under the jurisdiction of and maintained by a public authority and open to public travel, including non-motorized users. All roadway approaches must be under the jurisdiction of a public roadway authority, and no roadway approach may be on private property.

Public road means any highway, road, or street under the jurisdiction of and maintained by a public authority and open to public travel, including non-State-owned public roads and roads on tribal land.

Reporting year means a 1-year period defined by the State, unless noted otherwise in this section. It may be the Federal fiscal year, State fiscal year, or calendar year.

Railway-highway crossing protective devices means those traffic control devices in the Manual on Uniform Traffic Control Devices (MUTCD) specified for use at such crossings; and system components associated with such traffic control devices, such as track circuit improvements and interconnections with highway traffic signals.

Road safety audit means a formal safety performance examination of an existing or future road or intersection by an independent multidisciplinary audit team for improving road safety for all users.

Safety data includes, but are not limited to, crash, roadway characteristics, and traffic data on all public roads. For railway-highway crossings, safety data also includes the characteristics of highway and train traffic, licensing, and vehicle data.

Safety stakeholder means, but is not limited to:

(1) A highway safety representative of the Governor of the State;

(2) Regional transportation planning organizations and metropolitan planning organizations, if any;

(3) Representatives of major modes of transportation;

(4) State and local traffic enforcement officials;

(5) A highway-rail grade crossing safety representative of the Governor of the State;

(6) Representatives conducting a motor carrier safety program under section 31102, 31106, or 31309 of title 49, U.S.C.;

(7) Motor vehicle administration agencies;

(8) County transportation officials;

(9) State representatives of non-motorized users; and

(10) Other Federal, State, tribal, and local safety stakeholders.

Spot safety improvement means an improvement or set of improvements that is implemented at a specific location on the basis of location-specific crash experience or other data-driven means.

Strategic highway safety plan (SHSP) means a comprehensive, multiyear, data-driven plan developed by a State department of transportation (DOT) in accordance with 23 U.S.C. 148.

Systemic safety improvement means a proven safety countermeasure(s) that is widely implemented based on high-risk roadway features that are correlated with particular severe crash types.

§ 924.5 Policy.

(a) Each State shall develop, implement, and evaluate on an annual basis a HSIP that has the objective to significantly reduce fatalities and serious injuries resulting from crashes on all public roads.

(b) HSIP funds shall be used for highway safety improvement projects that are consistent with the State's SHSP. HSIP funds should be used to maximize opportunities to advance highway safety improvement projects that have the greatest potential to reduce the State's roadway fatalities and serious injuries.

(c) Safety improvements should also be incorporated into projects funded by other Federal-aid programs, such as the National Highway Performance Program (NHPP) and the Surface Transportation Program (STP). Safety improvements that are provided as part of a broader Federal-aid project should be funded from the same source as the broader project.

(d) Eligibility for Federal funding of projects for traffic control devices under this part is subject to a State or local/tribal jurisdiction's substantial conformance with the National MUTCD or FHWA-approved State MUTCDs and supplements in accordance with part 655, subpart F, of this chapter.

§ 924.7 Program structure.

- (a) The HSIP shall include:
 - (1) A SHSP;
 - (2) A Railway-Highway Crossing Program; and
 - (3) A program of highway safety improvement projects.
- (b) The HSIP shall address all public roads in the State and include separate processes for the planning, implementation, and evaluation of the HSIP components described in paragraph (a) of this section. These processes shall be developed by the States in cooperation with the FHWA Division Administrator in accordance with this section and the requirements of 23 U.S.C. 148. Where appropriate, the processes shall be developed in consultation with other safety stakeholders and officials of the various units of local and Tribal governments.

§ 924.9 Planning.

- (a) The HSIP planning process shall incorporate:
 - (1) A process for collecting and maintaining safety data on all public roads. Roadway data shall include, at a minimum, the MIRE Fundamental Data Elements as established in § 924.17. Railway-highway crossing data shall include all fields from the U.S. DOT National Highway-Rail Crossing Inventory.
 - (2) A process for advancing the State's capabilities for safety data collection and analysis by improving the timeliness, accuracy, completeness, uniformity, integration, and accessibility of their safety data on all public roads.
 - (3) A process for updating the SHSP that identifies and analyzes highway safety problems and opportunities in accordance with 23 U.S.C.148. A SHSP update shall:
 - (i) Be completed no later than 5 years from the date of the previous approved version;
 - (ii) Be developed by the State DOT in consultation with safety stakeholders;
 - (iii) Provide a detailed description of the update process. The update process must be approved by the FHWA Division Administrator;
 - (iv) Be approved by the Governor of the State or a responsible State agency official that is delegated by the Governor;
 - (v) Adopt performance-based goals that:
 - (A) Are consistent with safety performance measures established by FHWA in accordance with 23 U.S.C. 150; and
 - (B) Are coordinated with other State highway safety programs;
 - (vi) Analyze and make effective use of safety data to address safety problems and opportunities on all public roads and for all road users;
 - (vii) Identify key emphasis areas and strategies that have the greatest potential to reduce highway fatalities and serious injuries and focus resources on areas of greatest need;

(viii) Address engineering, management, operations, education, enforcement, and emergency services elements of highway safety as key features when determining SHSP strategies;

(ix) Consider the results of State, regional, local, and tribal transportation and highway safety planning processes and demonstrate mutual consultation among partners in the development of transportation safety plans;

(x) Provide strategic direction for other State and local/tribal transportation plans, such as the HSIP, the Highway Safety Plan, and the Commercial Vehicle Safety Plan; and

(xi) Describe the process and potential resources for implementing strategies in the emphasis areas.

(4) A process for analyzing safety data to:

(i) Develop a program of highway safety improvement projects, in accordance with 23 U.S.C. 148(c)(2), to reduce fatalities and serious injuries on all public roads through the implementation of a comprehensive program of systemic and spot safety improvement projects.

(ii) Develop a Railway-Highway Crossings program that:

(A) Considers the relative risk of public railway-highway crossings based on a hazard index formula;

(B) Includes onsite inspection of public railway-highway crossings; and

(C) Results in a program of highway safety improvement projects at railway-highway crossings giving special emphasis to the statutory requirement that all public crossings be provided with standard signing and markings.

(5) A process for conducting engineering studies (such as road safety audits and other safety assessments or reviews) to develop highway safety improvement projects.

(6) A process for establishing priorities for implementing highway safety improvement projects that considers:

(i) The potential reduction in fatalities and serious injuries;

(ii) The cost effectiveness of the projects and the resources available; and

(iii) The priorities in the SHSP.

(b) The planning process of the HSIP may be financed with funds made available through 23 U.S.C. 104(b)(3) and 505, and, where applicable in metropolitan planning areas, 23 U.S.C. 104(d). The eligible use of the program funding categories listed for HSIP planning efforts is subject to that program's eligibility requirements and cost allocation procedures as per 2 CFR part 200.

(c) Highway safety improvement projects, including non-infrastructure safety projects, to be funded under 23 U.S.C. 104(b)(3) shall be carried out as part of the Statewide and Metropolitan Transportation Planning Process consistent with the requirements of 23 U.S.C. 134 and 135 and 23 CFR part 450.

§ 924.11 Implementation.

(a) The HSIP shall be implemented in accordance with the requirements of § 924.9.

(b) States shall incorporate specific quantifiable and measurable anticipated improvements for the collection of MIRE fundamental data elements into their Traffic Records Strategic Plan by July 1, 2017. States shall have access to a complete collection of the MIRE fundamental data elements on all public roads by September 30, 2026.

(c) The SHSP shall include or be accompanied by actions that address how the SHSP emphasis area strategies will be implemented.

(d) Funds set-aside for the Railway-Highway Crossings Program under 23 U.S.C. 130 shall be used to implement railway-highway crossing safety projects on any public road. If a State demonstrates that it has met its needs for the installation of railway-highway crossing protective devices to the satisfaction of the FHWA Division Administrator, the State may use funds made available under 23 U.S.C. 130 for other types of highway safety improvement projects pursuant to the special rule in 23 U.S.C. 130(e)(2).

(e) Highway safety improvement projects may also be implemented with other funds apportioned under 23 U.S.C. 104(b) subject to the eligibility requirements applicable to each program.

(f) Award of contracts for highway safety improvement projects shall be in accordance with 23 CFR parts 635 and 636, where applicable, for highway construction projects, 23 CFR part 172 for engineering and design services contracts related to highway construction projects, or 2 CFR part 200 for non-highway construction projects.

(g) Except as provided in 23 U.S.C. 120 and 130, the Federal share of the cost of a highway safety improvement project carried out with funds apportioned to a State under 23 U.S.C. 104(b)(3) shall be 90 percent.

§ 924.13 Evaluation.

(a) The HSIP evaluation process shall include:

(1) A process to analyze and assess the results achieved by the program of highway safety improvement projects in terms of contributions to improved safety outcomes and the attainment of safety performance targets established as per 23 U.S.C. 150.

(2) An evaluation of the SHSP as part of the regularly recurring update process to:

(i) Confirm the validity of the emphasis areas and strategies based on analysis of current safety data; and

(ii) Identify issues related to the SHSP's process, implementation, and progress that should be considered during each subsequent SHSP update.

(b) The information resulting from paragraph (a)(1) of this section shall be used:

(1) To update safety data used in the planning process in accordance with § 924.9;

(2) For setting priorities for highway safety improvement projects;

(3) For assessing the overall effectiveness of the HSIP; and

(4) For reporting required by § 924.15.

(c) The evaluation process may be financed with funds made available under 23 U.S.C. 104(b)(3) and 505, and, for metropolitan planning areas, 23 U.S.C. 104(d). The eligible use of the program funding categories listed for HSIP evaluation efforts is subject to that program's eligibility requirements and cost allocation procedures as per 2 CFR part 200.

§ 924.15 Reporting.

(a) For the period of the previous reporting year, each State shall submit, via FHWA's HSIP online reporting tool, to the FHWA Division Administrator no later than August 31 of each year, the following reports related to the HSIP in accordance with 23 U.S.C. 148(h) and 130(g):

(1) A report describing the progress being made to implement the HSIP that:

(i) Describes the structure of the HSIP. This section shall:

(A) Describe how HSIP funds are administered in the State; and

(B) Provide a summary of the methodology used to develop the programs and projects being implemented under the HSIP on all public roads.

(ii) Describes the progress in implementing highway safety improvement projects. This section shall:

(A) Compare the funds programmed in the STIP for highway safety improvement projects and those obligated during the reporting year; and

(B) Provide a list of highway safety improvement projects that were obligated during the reporting year, including non-infrastructure projects. Each project listed shall identify how it relates to the State SHSP.

(iii) Describes the progress in achieving safety outcomes and performance targets. This section shall:

(A) Provide an overview of general highway safety trends. General highway safety trends shall be presented by number and rate of fatalities and serious injuries on all public roads by calendar year, and to the maximum extent practicable, shall also be presented by functional classification and roadway ownership. General highway safety trends shall also be presented for the total number of fatalities and serious injuries for non-motorized users;

(B) Document the safety performance targets established in accordance with 23 U.S.C. 150 for the following calendar year. Documentation shall also include a discussion of the basis for each established target, and how the established target supports SHSP goals. In future years, documentation shall

Federal Highway Administration, DOT

Pt. 924, Nt.

also include a discussion of any reasons for differences in the actual outcomes and targets; and

(C) Present information related to the applicability of the special rules defined in 23 U.S.C. 148(g).

(iv) Assesses the effectiveness of the improvements. This section shall describe the effectiveness of groupings or similar types of highway safety improvement projects previously implemented under the HSIP.

(v) Is compatible with the requirements of 29 U.S.C. 794(d), Section 508 of the Rehabilitation Act.

(2) A report describing progress being made to implement railway-highway crossing im-

provements in accordance with 23 U.S.C. 130(g) and the effectiveness of these improvements.

(b) The preparation of the State's annual reports may be financed with funds made available through 23 U.S.C. 104(b)(3).

§ 924.17 MIRE fundamental data elements.

The MIRE fundamental data elements shall be collected on all public roads, as listed in Tables 1, 2, and 3 of this section. For the purpose of MIRE fundamental data elements applicability, the term open to public travel is consistent with 23 CFR 460.2(c).

TABLE 1—MIRE FUNDAMENTAL DATA ELEMENTS FOR NON-LOCAL (BASED ON FUNCTIONAL CLASSIFICATION) PAVED ROADS

MIRE name (MIRE No.) ¹	
Roadway segment	Intersection
Segment Identifier (12)	Unique Junction Identifier (120).
Route Number (8) ²	Location Identifier for Road 1 Crossing Point (122).
Route/street Name (9) ²	Location Identifier for Road 2 Crossing Point (123).
Federal Aid/Route Type (21) ²	Intersection/Junction Geometry (126).
Rural/Urban Designation (20) ²	Intersection/Junction Traffic Control (131).
Surface Type (23) ²	AADT (79) [for Each Intersecting Road].
Begin Point Segment Descriptor (10) ²	AADT Year (80) [for Each Intersecting Road].
End Point Segment Descriptor (11) ²	
Segment Length (13) ²	
Direction of Inventory (18)	Unique Approach Identifier (139).
Functional Class (19) ²	
Median Type (54)	
Access Control (22) ²	
One/Two-Way Operations (91) ²	Interchange/Ramp.
Number of Through Lanes (31) ²	Unique Interchange Identifier (178).
Average Annual Daily Traffic (79) ²	Location Identifier for Roadway at Beginning Ramp Terminal (197).
AADT Year (80) ²	Location Identifier for Roadway at Ending Ramp Terminal (201).
Type of Governmental Ownership (4) ²	Ramp Length (187).
	Roadway Type at Beginning Ramp Terminal (195).
	Roadway Type at Ending Ramp Terminal (199).
	Interchange Type (182).
	Ramp AADT (191). ²
	Year of Ramp AADT (192). ²
	Functional Class (19). ²
	Type of Governmental Ownership (4). ²

¹ Model Inventory of Roadway Elements—MIRE, Version 1.0, Report No. FHWA-SA-10-018, October 2010, http://safety.fhwa.dot.gov/tools/data_tools/mirereport/mirereport.pdf.

² Highway Performance Monitoring System full extent elements are required on all Federal-aid highways and ramps located within grade-separated interchanges, i.e., National Highway System (NHS) and all functional systems excluding rural minor collectors and locals.

TABLE 2—MIRE FUNDAMENTAL DATA ELEMENTS FOR LOCAL (BASED ON FUNCTIONAL CLASSIFICATION) PAVED ROADS

MIRE name (MIRE No.) ¹
Roadway segment:
Segment Identifier (12).
Functional Class (19). ²
Surface Type (23). ²
Type of Governmental Ownership (4). ²
Number of Through Lanes (31). ²
Average Annual Daily Traffic (79). ²
Begin Point Segment Descriptor (10). ²
End Point Segment Descriptor (11). ²

TABLE 2—MIRE FUNDAMENTAL DATA ELEMENTS FOR LOCAL (BASED ON FUNCTIONAL CLASSIFICATION) PAVED ROADS—Continued

MIRE name (MIRE No.) ¹
Rural/Urban Designation (20). ²

¹ Model Inventory of Roadway Elements—MIRE, Version 1.0, Report No. FHWA-SA-10-018, October 2010, http://safety.fhwa.dot.gov/tools/data_tools/mirereport/mirereport.pdf.

² Highway Performance Monitoring System full extent elements are required on all Federal-aid highways and ramps located within grade-separated interchanges, i.e., National Highway System (NHS) and all functional systems excluding rural minor collectors and locals.

Pt. 924, Nt.

**TABLE 3—MIRE FUNDAMENTAL DATA ELEMENTS
FOR UNPAVED ROADS**

MIRE name (MIRE No.) ¹
Roadway segment:
Segment Identifier (12).
Functional Class (19). ²
Type of Governmental Ownership (4). ²
Begin Point Segment Descriptor (10). ²

23 CFR Ch. I (4–1–16 Edition)

**TABLE 3—MIRE FUNDAMENTAL DATA ELEMENTS
FOR UNPAVED ROADS—Continued**

MIRE name (MIRE No.) ¹
End Point Segment Descriptor (11). ²
¹ <i>Model Inventory of Roadway Elements—MIRE, Version 1.0</i> , Report No. FHWA-SA–10–018, October 2010, http://safety.fhwa.dot.gov/tools/data_tools/mirereport/mirereport.pdf .
² Highway Performance Monitoring System full extent elements are required on all Federal-aid highways and ramps located within grade-separated interchanges, i.e., National Highway System (NHS) and all functional systems excluding rural minor collectors and locals.